

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for identifying at least one object, the system comprising:

a signal transceiver system that detects a polarized light signal from the at least one object; and

a signal processing system that identifies at least one characteristic of the at least one object in response to the detected polarized light signal; and

a first optical polarizer arranged in a first orientation on at least a portion of the signal transceiver system with respect to a second optical polarizer arranged in a second orientation on at least a portion of a reflective surface on the object,

wherein the at least one object reflects the polarized light signal without diffracting the polarized light signal.

2. (Original) The system according to claim 1 further comprising a reflective surface on at least a portion of the object.

3. (Original) The system according to claim 1 wherein the signal transceiver system further comprises a photo emitter unit that transmits the polarized light signal towards the object.

4. (Original) The system according to claim 3 wherein the signal transceiver further comprises a drive unit that rotates the photo emitter unit, the signal processing system controlling the drive unit and causing the photo emitter unit to transmit the polarized light signal towards the object.

Claim 5 (Canceled)

6. (Currently Amended) The system according to claim 5 1 wherein the first optical polarizer covers at least a portion of the photo emitter unit.

7. (Currently Amended) The system according to claim 5 1 wherein the first optical polarizer covers at least a portion of a photo detector unit of the signal transceiver system.

8. (Original) The system according to claim 1 wherein the signal transceiver system further comprises a photo detector unit that detects the polarized light signal from the object.

9. (Original) The system according to claim 1 wherein the object comprises an ink cartridge.

10. (Original) The system according to claim 1 wherein the at least one characteristic comprises a low or high capacity, a particular brand, or a presence of an ink cartridge in a printing system.

11. (Currently Amended) A method for identifying at least one object, the method comprising:

reflecting a transmitted polarized light signal off of a reflective surface on the object when the transmitted polarized light signal has a polarization that is substantially the same as the polarization of an optical polarizer covering at least a portion of the reflective surface;

detecting a polarized light signal from the object; and

identifying at least one characteristic of the at least one object in response to the detected signal,

wherein the at least one object reflects the polarized light signal without diffracting the polarized light signal.

12. (Original) The method according to claim 11 further comprising transmitting the polarized light signal towards the object.

13. (Original) The method according to claim 12 wherein the transmitting further comprises rotating a photo emitter unit, the transmitting being carried out by the photo emitter unit.

Claim 14 (Canceled)

15. (Original) The method according to claim 11 wherein the detecting further comprises receiving the polarized light signal at a photo detector unit when the polarized light signal has a polarization that is substantially the same as the polarization of an optical polarizer covering at least a portion of the photo detector unit.

16. (Original) The method according to claim 11 wherein the identifying further comprises determining whether an ink cartridge has a low or high capacity, is a particular brand or is present in a printing system.

17. (Currently Amended) A computer readable medium having stored thereon instructions for identifying at least one object, which when executed by at least one processor, causes the processor to perform:

reflecting a transmitted polarized light signal off of a reflective surface on the object when the transmitted polarized light signal has a polarization that is substantially the same as the polarization of an optical polarizer covering at least a portion of the reflective surface;

detecting a polarized light signal from the at least one object; and

identifying at least one characteristic of the at least one object in response to the detected polarized light signal,

wherein the at least one object reflects the polarized light signal without diffracting the polarized light signal.

18. (Original) The medium according to claim 17 further comprising transmitting the polarized light signal towards the object.

19. (Original) The medium according to claim 18 wherein the transmitting further comprises rotating a photo emitter unit, the transmitting being carried out by the photo emitter unit.

Claim 20 (Canceled)

21. (Original) The system according to claim 17 wherein the detecting further comprises receiving the polarized light signal at a photo detector unit when the polarized light signal has a polarization that is substantially the same as the polarization of an optical polarizer covering at least a portion of the photo detector unit.

22. (Original) The medium according to claim 17 wherein the identifying further comprises determining whether an ink cartridge has a low or high capacity, is a particular brand or is present in a printing system.

Claims 23-30 (Canceled)